

REMARKS

Favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks.

Summary of Office Action

In the April 9, 2007 Office Action claims 1-4, 6, and 10-13 were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,813,855 to Crisio ("Crisio'855") in view of U.S. Patent No. 6,599,048 to Kuo ("Kuo'048"). Claims 1, 5, 6, 10, and 14 were rejected under 35 U.S.C. §103(a) over Crisio'855 in view of U.S. Patent No. 5,991,959 to Raven ("Raven'959"). Claims 7-9 and 15-17 were rejected under 35 U.S.C. §103(a) over Crisio'855 in view of Kuo'048 and further in view of Raven'959. The drawings were also objected to for including a miscellaneous reference number.

Summary of Response to Office Action

By this Amendment, the specification and Claims 1 and 10 are amended, new Claims 18 and 19 are added, and a Replacement Sheet of drawings is submitted along with an Annotated Sheet to show changes made. Accordingly, the claims currently pending in this application are Claims 1-19. Claims 1, 6 and 10 are the only independent claims.

Drawings

The specification has been amended and a Replacement Sheet of drawings has been submitted in this application to correct the minor informalities pointed out in the Office Action. Accordingly, withdrawal of the objection to the drawings is respectfully requested.

All Claims Define Allowable Subject Matter

In the Office Action, beginning at page 2, paragraph 3, claims 1-4, 6, and 10-13 were rejected under 35 U.S.C. §103(a) over Crisio'855 in view of Kuo'048. This rejection is

respectfully traversed and Applicant requests reconsideration for at least the following reasons.

The Crisio'855 patent discloses an illuminated toothbrush. The Crisio'855 patent toothbrush is similar to JP2003-047528 (Patent Document 1 described in the Background section of the present patent application). In particular, the Crisio'855 patent discloses a toothbrush 10 that has a head portion 16 connected to a handle portion 18. The handle portion 18 includes a "light ray transmitting shaft means" 30 that transmits light to bristle tufts 20.

The object of the Crisio'855 patent is achieved by the specific configuration of the bristle tufts 20. Specifically, the bristle tufts 20 have a "roughened" surface at their midpoint, which allows light access into the bristle. The midpoint of each bristle is embedded in the head portion 16 of the toothbrush and opposite ends of each bristle tuft 20 extend from the head portion 16 to serve as the toothbrush bristles. Thus, light can enter into each bristle with more efficiency.

The Kuo'048 patent discloses a toothbrush that includes a rubber guard 5 that can be located on a bristle platform 7 of the toothbrush. As shown in Fig. 2c of the Kuo'048 patent (reproduced below), the rubber guard includes a drainage hole 9.

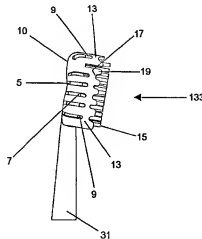


Fig. 2c of the Kuo'048 patent

With regard to claim 1, both Crisio'855 and Kuo'048 fail to disclose, either alone or in combination, at least the feature of a tip-end light transmitting portion that is configured to transmit light received from the light emitting means outside of the head portion to illuminate an interior of an oral cavity. Neither the Crisio'855 patent nor the Kuo'048 patent include such a tip-end light transmitting portion, nor are they concerned with lighting the interior of an oral cavity, and therefore do not include or contemplate using at least the above-described features.

With regard to claim 10, both Crisio'855 and Kuo'048 fail to disclose, either alone or in combination, at least the feature of a head portion light transmitting portion that is configured to transmit light received from the light emitting device outside of the head portion to illuminate an interior of an oral cavity.

With regard to claim 6, there is no disclosure or teaching of at least the feature of an elastic body being formed from a transparent material in the Crisio'855 and Kuo'048 patents, either when taken alone or when viewed in alleged combination. The Office Action indicates that the construction of the elastic member from transparent material would have been "an obvious design choice." Applicant respectfully disagrees with this assertion. The construction of the elastic member from transparent material provides unique light emitting characteristics for the toothbrush and is not merely a design choice. It is respectfully submitted that there is no teaching of a device that includes transparent elastic material at the head of a toothbrush. Accordingly, it is also respectfully submitted that the outstanding rejection is in error and withdrawal of the rejection is respectfully requested. Should such a rejection be maintained, Applicants respectfully request that some evidence be provided to support the Examiner's position regarding alleged design choice.

In the Office Action, the Examiner alleges that it would have been obvious to have placed the rubber guard as shown in the Kuo'048 patent over the head portion 16 of the Crisio'855 patent. The Examiner alleges that it would have been obvious to combine the Crisio'855 patent toothbrush with the Kuo'048 patent rubber guard 5 "in order to provide a barrier between the bristles and the gums during brushing." However, it is respectfully submitted that not only are

these references deficient in their teachings, but that they also would not have been obviously combined because the Crisio'855 and Kuo'048 devices are each different types of toothbrushes, and the only reason the two references are being combined is to create a rejection against the present application using Applicant's invention as a roadmap, which is the exact definition of use of improper hindsight. Otherwise, there is no specific teaching in the Kuo'048 patent that would cause one of skill in the art to modify a particular illuminated toothbrush with the rubber gum guard of Kuo'048.

In addition, any combination of the Crisio'855 patent with the teaching of the Kuo'048 patent would not have resulted in Applicant's presently claimed invention. Specifically, the feature of "a tip end of the head portion not including the elastic portion located thereon and thereby provided with a tip-end light transmitting portion" (claim 1) and the feature of "a portion of the head portion not including the elastic portion located thereon and thereby provided with a head portion light transmitting portion" (claim 10) would not be included in a device resulting from the combination of the Crisio'855 patent with the teaching of the Kuo'048 patent. In addition, the feature of an elastic body formed from a transparent material would not be included in a device resulting from the combination of the Crisio'855 patent with the teaching of the Kuo'048 patent (claim 6).

Because neither the Crisio'855 patent nor the Kuo'048 patent, either alone or in combination, teach the above-referenced features, as well as other features, of Applicant's claims 1, 6 and 10, it is respectfully submitted that there is no *prime facie* case for obviousness.

The Office bears the initial burden of establishing a *prima facie* case of obviousness. M.P.E.P. § 2142. If the Office fails to set forth a *prima facie* case of obviousness, Applicant is under "no obligation to submit evidence of nonobviousness," such as unexpected results or commercial success. *Id.* In other words, if the Office fails to meet the initial burden of establishing a *prima facie* case of obviousness as to a given claim, then that claim is not obvious without any specific evidence of nonobviousness by Applicant.

In order to establish a *prima facie* case of obviousness, the Office must satisfy three requirements. M.P.E.P. § 2142. First, "the prior art reference, or references when combined, must teach or suggest *all* the claim limitations." *Id.* (emphasis added). Second, the Office must show that there is "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." *Id.* Finally, "there must be a reasonable expectation of success." *Id.*

In the present case, as stated above, neither of the cited references either alone or in combination teaches or suggests at least the feature of a tip-end light transmitting portion that is configured to transmit light received from the light emitting means outside of the head portion to illuminate an interior of an oral cavity (claim 1), a head portion light transmitting portion that is configured to transmit light received from the light emitting device outside of the head portion to illuminate an interior of an oral cavity (claim 10), or the feature of an elastic body being formed from a transparent material (claim 6). Thus, the Office Action fails to establish a *prima facie* case of obviousness as to claims 1, 6 and 10.

The Office Action fails to meet the three requirements for establishing a *prima facie* case of obviousness. Therefore, Applicant respectfully requests that the rejection of claims 1, 6, and 10 under 35 U.S.C. § 103(a) be withdrawn.

Further, since claims 2-4 and 11-13 depend from and respectively incorporate all the features of claims 1 and 10, respectively, claims 2-4 and 11-13 are also not obvious over the Crisio'855 patent in view of the Kuo'048 patent at least for the above reasons for which claims 1 and 10 are not obvious, and for the separate features that each of these claims recites. Thus, Applicant respectfully requests that the rejection of claims 1-4, 6 and 10-13 under 35 U.S.C. § 103(a) be withdrawn.

Claims 1, 5, 6, 10, and 14 were rejected under 35 U.S.C. § 103(a) over Crisio'855 in view of Raven'959. This rejection is respectfully traversed and Applicant requests reconsideration for at least the following reasons.

The Raven'959 patent discloses a toothbrush that has a head 1 that is entirely covered in resilient material. In the Office Action, it is alleged that the resilient material (presumably extending from resilient side members 6) as shown in Fig. 16 of the Raven'959 patent (reproduced below) can be considered the "elastic portion" as recited in claim 14 of the present application.

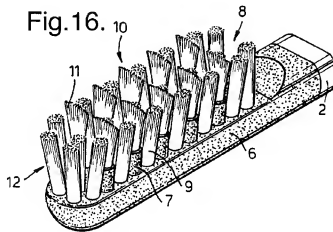


Fig. 16 of the Raven'959 patent

In particular, it is alleged in the Office Action that the resilient material of the Raven'959 patent extends along at least a portion of the handle 2 of the toothbrush, and therefore discloses a "shaft elastic body" as recited in claim 14.

At the outset, it is respectfully submitted that Raven'959 is deficient for at least the same reasons as outlined above with regard to the base reference to Crisio'855. Specifically, with regard to claim 1, both Crisio'855 and Raven'959 fail to disclose, either alone or in combination, at least the feature of a tip-end light transmitting portion that is configured to transmit light received from the light emitting means outside of the head portion to illuminate an interior of an oral cavity. Again, neither the Crisio'855 patent nor the Raven'959 patent are concerned with lighting the interior of an oral cavity, and therefore do not include or contemplate using the above-described feature. With regard to claim 10, both Crisio'855 and Raven'959 fail to

disclose, either alone or in combination, at least the feature of a head portion light transmitting portion that is configured to transmit light received from the light emitting device outside of the head portion to illuminate an interior of an oral cavity. With regard to claim 6, there is no disclosure or teaching of at least the feature of an elastic body being formed from a transparent material in the Crisio'855 and Raven'959 patents, either when taken alone or when viewed in alleged combination.

Because claims 5 and 14 depend from and respectively incorporate all the features of claims 1 and 10, respectively, claims 5 and 14 are also not obvious over the Crisio'855 patent in view of the Raven'959 patent at least for the above reasons for which claims 1 and 10 are not obvious, and for the separate features that each of these claims recites. Thus, Applicant respectfully requests that the rejection of claims 1, 5, 6, 10 and 14 under 35 U.S.C. § 103(a) be withdrawn.

Claims 7-9 and 15-17 were rejected under 35 U.S.C. § 103(a) over Crisio'855 in view of Kuo'048 and further in view of Raven'959. This rejection is respectfully traversed and Applicant requests reconsideration for at least the following reasons.

As indicated above, the Raven'959 patent fails to provide the features missing from the base reference to Crisio'855. These same features are also missing from the secondary reference to Kuo'048. In particular, Crisio'855, Kuo'048, and Raven'959 fail to disclose, either alone or in any assorted combination, at least the feature of a head portion light transmitting portion that is configured to transmit light received from the light emitting device outside of the head portion to illuminate an interior of an oral cavity, as recited in claim 10. With regard to claim 6, there is no disclosure or teaching of at least the feature of an elastic body being formed from a transparent material in the Crisio'855, Kuo'048 and Raven'959 patents, either when taken alone or when viewed in alleged combination.

Because claims 7-9 and 15-17 depend from and respectively incorporate all the features of claims 6 and 10, respectively, claims 7-9 and 15-17 are also not obvious over the Crisio'855 patent in view of the Kuo'048 patent and further in view of the Raven'959 patent, at least for the

above reasons for which claims 6 and 10 are not obvious, and for the separate features that each of these claims recites. Thus, Applicant respectfully requests that the rejection of claims 7-9 and 15-17 under 35 U.S.C. § 103(a) be withdrawn.

New Claims

New claims 18 and 19 are added to provide an alternate scope of protection for the invention. It is respectfully submitted that these new claims are also in immediate form for allowance. Early and favorable examination of all claims is respectfully requested.

Conclusion

Applicant respectfully submits that the present patent application is in condition for allowance in its entirety. An early indication of the allowability of this patent application is therefore respectfully solicited.

If the Patent Examiner believes that a telephone conference with the undersigned would expedite passage of this patent application to issue, he is invited to call on the number below.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. If, however, additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and the Commissioner is hereby authorized to charge fees

U.S. Patent Application No. 10/525,734

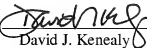
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necessitated by this paper, and to credit all refunds and overpayments, to our Deposit Account listed on the application transmittal filed with this application.

Respectfully submitted,
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